Dear Dr. Kandler:

W-3231 is a diaminopimelic acid-requiring auxotrophic mutant of E. coli. When its requirement for DAP is satisfied (by the presence of 10-20 µg/ml added to the medium) it grows in the bacillary form, as it is in the culture you have. When transferred to ordinary media, lacking DAP, it grows in L-form (preferably if 10% sucrose and Mg<sup>++</sup>) are added.

Watch out for occasional spontaneous reverse-mutations from DAP to DAP.

My assistant will be sending you a copy of a ms. recently submitted to the Jour. Bacteriology which should clarify these remarks further. My immediate suggestion is that you transfer the W-3231 to nutraent broth or agar Plus DAP, and make further platings from this medium.

This culture is the same as that cited by Bauman & Davis in a recent note in Science (126, 170).

I am sorry that, being so far away from my lab., it is difficult for me to expedite your requests; I will be back home in December.

With best regarden

Yours sincerely,

Joshua Lederberg